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10/530,649	04/06/2005	Tay Kim Huat Abel Paschal	B-5680PCT 622590-9	7624
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EXAMINER				
POND, ROBERT M				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/530,649

Applicant(s)

PASCHAL, TAY KIM HUAT ABEL

Examiner

Robert M. Pond

Art Unit

3625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. **Claims 1-29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

Applicants are claiming a system while lacking tangible embodiment for data structures (i.e. items) representing raw materials, manpower and production facilities. Correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 3. Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Applicants are claiming a system and software data structures rendering the claims ambiguous. Examination is based on data structures (i.e. items) representing raw materials, manpower and production facilities being embodied in computing structures such as computer readable medium or memory to render the claim as an apparatus/system claim. Correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 4. Claims 1-6, 10, 13, 16-20, 22, 24-26, 30-32, 36-38 and 42 are rejected under 35 USC 102(b) as being anticipated by Summers (US 6,236,955).**

Summers teaches all the limitation of claims 1-6, 10, 13, 16-20, 22, 24-26, 30-32, 36-38 and 42. For example, Summers discloses a management training simulation system and methods that develops the decision-making skills of a user in a defined, simulated situation which includes one or more firms controlled by participants in the simulation which cause particular object designs to be

injected into the simulation. See at least abstract; Fig. 8; col. 1-col.7. Summers further discloses:

- Regarding claim 30. simulating the business environment in cycles where each participant takes a turn, and, at the commencement of a cycle, information relevant to the business environment is communicated to each of the participants and each participant takes individual turns to effect actions in an attempt to optimise the value of their simulated organisation for that cycle; one or more students participate in the simulation; recording each participant's action in the computing means; The MTS generally

progresses through five steps of prior art MTSs which are repeated each round. In addition, the present MTS also requires two additional steps that occur only once during a learning session. First, the MTS initializes the learning session before the initial round. Second, the MTS simulates a technological breakthrough during the learning session.

Five steps Comprising Each Round: See at least Figs. 2, 8; col. 19, line 26-col. 20, line 9.

Steps One, Two, and Three: As described earlier, the first three steps of an MTS consist of each student (1) analyzing the marketplace information, (2) making decisions for his firm, and (3) sending these decisions to his firm through the interface. This includes the following tasks:

1. Each student views and analyzes the market database for the purpose of designing products and setting a production schedule for the round. To accomplish these tasks, students utilize charting, graphing, intuitive heuristics, and/or other means that they deem useful. Necessarily, as described below, students hypothesize product categories and perspectives. For simplicity, this embodiment does not record or analyze this process.

2. Based upon their analysis of the market database, each student designs new products for his firm.
3. Choosing from the products previously offered to the marketplace and from his new designs, each student selects products to manufacture in the current round.
4. Each student determines the production volume for each product that he will manufacture. If desired, each student can buy new production capacity or sell unused production capacity. When making production decisions, a student cannot exceed his firm's budget. Students should account for the cost/revenue of buying/selling production capacity, the variable production costs, and royalties.
5. Using the interface, each student sends his production plans to his firm.

Step Four: After the interface sends a student's production plans to his firm, the MTS causes for each firm (1) an update to its production capacity, (2) an update its budget, and (3) sends the products and production volumes of that firm to the marketplace.

Step Five: The marketplace receives the production from firms. Using an nk-landscape function as a product value function described above, a product evaluator (FIG. 8, field 803) evaluates each product. After products are valued, the market manipulator (FIG. 8, field 802) takes the products' values as input and calculates demand using either the equations in the aforesaid provisional patent application or a Gold and Pray system of demand equations. From the demand and firms' production, the marketplace calculates sales. The marketplace then records the results in the market database and sends the revenues to the appropriate firms. Subsequently, the firms' routines update their budgets accordingly.

After completing these five the round is complete, and the next round, if any, begins with step one.

- Regarding claim 30. and communicating the actions of each participant with all other computing means, such that the actions of each participant may be analysed and compared with the actions of other participants.

Automatically evaluate the performance of a particular student's design or designs relative to predetermined criteria such as other student designs or bench mark level established statistically. See at least col. 35, lines 28-50.

- Regarding claims 31. wherein an experienced business person or instructor assists participants to understand the result of their decisions during the previous round and how their decisions could have been modified to produce a better result. Through competition, students will

settle on a category of products from the initially valid set of products. Once this occurs the number of innovations in each round will decrease. The decrease occurs because as designs improve it becomes more difficult, and therefore costly, for students to find better designs from the same product category. The MTS monitors the rate of innovation. When the rate of innovation is sufficiently low, the design restrainer, 804 of FIG. 8, as implemented by the central computer, 2010 of FIG. 20, or instructor 2020 of FIG. 20, expands the domains of the product attributes that have been restricted. This simulates a technological breakthrough. The design restrainer can restore the full domain of the attributes in a single round or does so piecemeal over several rounds. As domains expand, students can search through the larger set of allowable products. When all of the restrictions are removed, students can search the entire product space. See at least Fig. 20; col. 20, lines 43-60; col. 35, lines 5-13. Central computer evaluates student designs and instructor monitor student progress. See at least col. 35, line 62-col. 36, line 9.

- Regarding claim 32. selecting a market condition for each round and advising each participant of that condition that will prevail for that round. Simulates industry life cycle (fluid stage, transition state, stable stage, demise. See at least col. 20, lines 28-29; col. 26, line 15-col. 27, line 10. including market disturbances. See at least col. 33, lines 3-18.

- Regarding claim 36. Rejection is based on disclosures previously cited above and other related disclosures.
- Regarding claim 37. debrief to student. Evaluates student's performance; simulation administrator (i.e. instructor) identifies which of the student's judgments are erroneous. See at least col. 35, lines 28-50. instructor reviews and monitors student progress. See at least col. 35, line 62-col. 36, line 9. explaining an error to the student in a report or other output. See at least col. 30, lines 28-37.
- Regarding claims 1-4, 10, 13, 16-18, 22, and 24-26. Rejections are based on disclosures cited above.
- Regarding claims 5 and 6. learning message. See at least col. 18, line 62-col. 19, line 2. explaining an error to the student in a report or other output. See at least col. 30, lines 28-37. Claim 6 as noted above for claim 37.
- Regarding claim 19. reports; marketshare information. see at least col. 3, lines 30-40.
- Regarding claim 20. in market analysis, students use charts, graphs or other means to analyze the market database. See at least col. 18, lines 19-28; col. 19, lines 24-40.
- Regarding claims 38 and 42. computer readable medium. See at least col. 38, line 66-col. 39, line 20.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 33, 34 and 39-41 are rejected under 35 USC 103(a) as being unpatentable over Summers (US 6,236,955).

Regarding claim 33, Summers teaches all the above as noted under the 102(b) rejection and teaches i) processing the finished goods; and placing those goods into the virtual common market for sale, manufacturing and ship simulation (note: interpret as including packing), ii) processing those materials through a planning and design stage to produce finished goods; planning and design phase for products for manufacture and shipping as noted above, iii) purchasing production capacity and manufacturing products to be sold in a virtual marketplace and iv) yellow paint (i.e. raw material) as an added resource to produce cars that are yellow. See at least col. 38, lines 12-23. It would have been obvious to try, by one of ordinary skill in the art at time the invention was made, to purchase raw materials from the virtual marketplace and incorporate it into the system of Summers since there are a finite number of identified, predictable potential solutions to the recognized need and one of ordinary skill in the art could have pursued the known potential solutions with a reasonable expectation

of success. Obviousness under 35 USC 103 in view of the Supreme Court decision *KSR International Co. vs. Teleflex Inc.*

Regarding claim 34, Summers teaches all the above as noted under the 103(a) rejection and teaches and suggests i) purchasing processing facilities, raw materials, ii) purchasing production capacity and selling production capacity; utilizing the firm's manufacturing plant to produce automobiles and iii) labor ratios and labor cost associated with manufacturing the products. It would have been obvious to try, by one of ordinary skill in the art at time the invention was made, to purchase labor required to support added production capacity purchases and incorporate it into the system of Summers since there are a finite number of identified, predictable potential solutions to the recognized need and one of ordinary skill in the art could have pursued the known potential solutions with a reasonable expectation of success. Obviousness under 35 USC 103 in view of the Supreme Court decision *KSR International Co. vs. Teleflex Inc.*

6. Claim 35 is rejected under 35 USC 103(a) as being unpatentable over Summers (US 6,236,955) in view of Tani (US 6,529,788).

Summers teaches and suggests all the above as noted under the 103(a) rejection and teaches and suggests i) purchasing raw materials from a virtual marketplace and ii) selling product via the virtual marketplace. Although Summers does not mention wherein finished goods sold to the market are recycled into raw materials which may be subsequently purchased, Tani on the

other hand teaches recycling products, recovering the product's raw materials and further teaches reselling or reusing the recovered product resulting in a large reduction in environmental load as most parts and materials constituting the recycled product are reused. See at least abstract; col. 6, lines 17-25. One of ordinary skill in the art at time the invention was made would have recognized that applying the known techniques of Tani of selling recycle raw materials and would have yielded predictable results and resulted in an improved system. It would have been recognized that applying the techniques of ON4 to the teachings of Summers would have yielded predictable results because the level of ordinary skill in the art demonstrated by the references applied shows the ability to incorporate such data processing features into similar systems. Obviousness under 35 USC 103 in view of the Supreme Court decision *KSR International Co. vs. Teleflex Inc.*

7. Claim 7-9 are rejected under 35 USC 103(a) as being unpatentable over Summers (US 6,236,955) in view of ON1 (official notice regarding old and well known in the arts).

Summers teaches all the above as noted under the 102(b) rejection and teaches i) simulating production from physical plants (note: physical plants occupy space in geographical location) and ii) using charts and graphs to analysis market data. The Examiner takes the position that plotting property or assets on a map are old and well known in the arts. One of ordinary skill in the

art at time the invention was made would have recognized that applying the known techniques of ON1 of plotting property on a map would have yielded predictable results and resulted in an improved system. It would have been recognized that applying the techniques of ON1 to the teachings of Summers would have yielded predictable results because the level of ordinary skill in the art demonstrated by the references applied shows the ability to incorporate such data processing features into similar systems. Obviousness under 35 USC 103 in view of the Supreme Court decision *KSR International Co. vs. Teleflex Inc.*

8. Claim 11-12 are rejected under 35 USC 103(a) as being unpatentable over Summers (US 6,236,955) in view of ON2 (official notice regarding old and well known in the arts).

Summers teaches all the above as noted under the 102(b) rejection and teaches simulating production from physical plants (note: physical plants occupy land space in a geographical location). Although Summers does not mention the land occupied by a firm's plant(s) and office space contributing value, the Examiner takes the position that property or assets comprising land and office space contributing value to a company are well known in the arts. One of ordinary skill in the art at time the invention was made would have recognized that applying the known techniques of ON2 of possessing land and/or office space to contribute value to a company would have yielded predictable results and resulted in an improved system. It would have been recognized that applying

the techniques of ON1 to the teachings of Summers would have yielded predictable results because the level of ordinary skill in the art demonstrated by the references applied shows the ability to incorporate such data processing features into similar systems. Obviousness under 35 USC 103 in view of the Supreme Court decision *KSR International Co. vs. Teleflex Inc.*

9. Claim 14 is rejected under 35 USC 103(a) as being unpatentable over Summers (US 6,236,955) in view of ON3 (official notice regarding old and well known in the arts).

Summers teaches all the above as noted under the 102(b) rejection and teaches simulating technology innovation and product designs. Although Summers does not mention hiding assets from other participants, the Examiner takes the position that concealing corporate technological innovation until such time it is ready to be released for public consumption is a routine business practice and well known in the arts. One of ordinary skill in the art at time the invention was made would have recognized that applying the known techniques of ON3 of hiding assets from other companies would have yielded predictable results and resulted in an improved system. It would have been recognized that applying the techniques of ON3 to the teachings of Summers would have yielded predictable results because the level of ordinary skill in the art demonstrated by the references applied shows the ability to incorporate such data processing

features into similar systems. Obviousness under 35 USC 103 in view of the Supreme Court decision *KSR International Co. vs. Teleflex Inc.*

10. Claim 15 is rejected under 35 USC 103(a) as being unpatentable over Summers (US 6,236,955) in view of ON4 (official notice regarding old and well known in the arts).

Summers teaches all the above as noted under the 102(b) rejection and teaches i) the simulated firm having a budget and situations where the student has over spent the budget and ii) an instructor providing control over the simulation. Although Summers is does not mention borrowing money from a bank, the Examiner takes the position that borrowing money from a bank via a loan officer is a routine business practice and well known in the arts. One of ordinary skill in the art at time the invention was made would have recognized that applying the known techniques of ON4 borrowing money from a bank would have yielded predictable results and resulted in an improved system. It would have been recognized that applying the techniques of ON4 to the teachings of Summers would have yielded predictable results because the level of ordinary skill in the art demonstrated by the references applied shows the ability to incorporate such data processing features into similar systems. Obviousness under 35 USC 103 in view of the Supreme Court decision *KSR International Co. vs. Teleflex Inc.*

11. Claim 21 is rejected under 35 USC 103(a) as being unpatentable over Summers (US 6,236,955) in view of ON5 (official notice regarding old and well known in the arts).

Summers teaches all the above as noted under the 102(b) rejection and teaches simulating a firm's business operations and evaluating performance based on decisions made by the participating student. Summers addresses some of performance factors but is silent on others. The Examiner takes the position that the use or awareness of performance factors to evaluate a company's performance, for example, as supplied in an annual report are old and well known in the arts. One of ordinary skill in the art at time the invention was made would have recognized that applying the known techniques of ON5 of evaluating performance factors would have yielded predictable results and resulted in an improved system. It would have been recognized that applying the techniques of ON5 to the teachings of Summers would have yielded predictable results because the level of ordinary skill in the art demonstrated by the references applied shows the ability to incorporate such data processing features into similar systems. Obviousness under 35 USC 103 in view of the Supreme Court decision *KSR International Co. vs. Teleflex Inc.*

12. Claim 23 is rejected under 35 USC 103(a) as being unpatentable over Summers (US 6,236,955) in view of ON6 (official notice regarding old and well known in the arts).

Summers teaches all the above as noted under the 102(b) rejection and teaches i) computer-based simulation of a firm's business operations and evaluating performance based on decisions made by the participating student and ii) the student using a computer to interact with the simulator system. Although Summers is silent on PDAs or pocket PCs, the Examiner takes the position that handheld computers such as a PDA or pocket PCs as alternatives to other types of computers are old and well known in the arts. One of ordinary skill in the art at time the invention was made would have recognized that applying the known techniques of ON6 using a PDA or Pocket PC would have yielded predictable results and resulted in an improved system. It would have been recognized that applying the techniques of ON6 to the teachings of Summers would have yielded predictable results because the level of ordinary skill in the art demonstrated by the references applied shows the ability to incorporate such data processing features into similar systems. Obviousness under 35 USC 103 in view of the Supreme Court decision *KSR International Co. vs. Teleflex Inc.*

13. Claims 27-29 are rejected under 35 USC 103(a) as being unpatentable over Summers (US 6,236,955) in view of ON7 (official notice regarding old and well known in the arts).

Summers teaches all the above as noted under the 102(b) rejection and teaches i) providing management training using a computer-based simulation of a firm's business operations and evaluating student performance based on decisions made by the participating student, ii) many business schools, corporate universities, consulting firms, training firms use management training simulators and iii) activating a training simulation. Although Summers is silent on how the cost of providing the simulations training service is covered, the Examiner takes the position that methods of establishing an account to pay for training and debiting the account to pay for training provided sufficient funds exist are old and well known in the arts. One of ordinary skill in the art at time the invention was made would have recognized that applying the known techniques of ON7 would have yielded predictable results and resulted in an improved system. It would have been recognized that applying the techniques of ON6 to the teachings of Summers would have yielded predictable results because the level of ordinary skill in the art demonstrated by the references applied shows the ability to incorporate such data processing features into similar systems. Obviousness under 35 USC 103 in view of the Supreme Court decision *KSR International Co. vs. Teleflex Inc.*

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US 6,931,365 (Mehta et al.) August 2005; teaches business war-gaming simulation training.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M. Pond whose telephone number is 571-272-6760. The examiner can normally be reached on 8:30AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Jeff Smith can be reached on 571-272-6763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service

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Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert M. Pond/
Primary Examiner, Art Unit 3625
June 10, 2008